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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/768,979

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Brian Caulfield

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08/07/2006

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EXAMINER

VEILLARD, JACQUES

ART UNIT

PAPER NUMBER

2165

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/768,979	Applicant(s) CAULFIELD ET AL.	
	Examiner Jacques Veillard	Art Unit 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/21/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to the applicant's communication filed on 2/02/2004.
2. Claims 1-19 are pending and presented for examination.

#### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on April 21, 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, it has been placed in the application file. The information referred to therein has been considered as to the merits.

#### ***Claim Objections***

5. Claims 6,7, 9, 12, 14, 17 and 18 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only, and/or, cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, claims 6,7, 9, 12, 14, 17 and 18 have not been further treated on the merits.

As per claims 8, 10, 11, 13, 15, 16, they have not been also treated on the merits due to their dependencies directly or indirectly of claims 6,7, 9, 12, 14, 17 and 18.

#### ***Claim Rejections - 35 USC § 112***

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6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3-19 are rejected under 35 U.S.C. 112; second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 6 recite the limitation "the vector extraction means" in line 1. There is insufficient antecedent basis for this limitation in the claim. Furthermore, it is unclear to what vector extraction means applicant(s) referred to. Appropriate explanation and correction is required.

Claims 4-5, and 7-19 are at least rejected for their dependencies directly or indirectly on the rejected claims 3 and 6.

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The limitation "similarity indicator" recited in the instant independent claim 1 does not appear to be described in the specification in a way to enable one having ordinary skill to make and use the invention. Applicant(s) does (do) not provide a definition as to what a "similarity

indicator” meant in the specification. Therefore, applicant(s) is/are advised to amend the specification or cancel the above-mentioned limitation from the claim. Furthermore, Applicant(s) is/are reminded that no new matter should be added.

***Claim Rejections - 35 USC § 101***

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically directed towards software per se.

The system as disclosed in claim 1 with respect to the means appears to be software per se. The specification as written is totally silent regarding hardware enabling the functionality of those means. The system as claimed is a software program made up of means, since the software program constituting the system is not claimed as embodied in a computer, the claim is not directed to statutory subject matter. Without the above, the functionality of the software cannot be realized since it is not directly accessible by computer. Therefore, the claim is rejected under 35 U.S.C. 101 as being non-statutory.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Cuthbertson et al. (U. S. Pat. No. 5,724,597).

As per claim 1, Cuthbertson et al. disclose a system for matching textual strings. The textual strings are transformed by a plurality of predefined filters wherein the transformed textual strings are compared utilizing a plurality of predefined comparators to determine if the two transformed textual strings match (See Cuthbertson et al. Title, Abstract, and col.1, line 36 through col.2, line 11). In particular, Cuthbertson et al. disclose a matching routine for textual strings representing a name and/or address is required that can determine if a match exists even in the presence of noise and variation, such as a space or an unnecessary punctuation mark, wherein a "remover" to remove noise or a filter to eliminate non-alphanumeric symbols, such as punctuation marks or multiple spaces (See Cuthbertson et al. col.1, lines 19-34; col.2, lines 36-47), Cuthbertson et al. achieved the limitation of matching record pairs based on measuring similarity of selected field pairs within the record, and for generating a similarity indicator for each record pair by providing a comparator capable of comparing two textual strings if the strings match according to each comparator's predetermined matching system. The comparators compare the textual strings utilizing many techniques. For example, a "soundex" comparator determines that a match is found between two textual strings if they sound the same. As each individual comparator may have its own measurement system for determining the similarity between two strings, a common scoring procedure is necessary to provide a unified penalty score. The common scoring procedure is also necessary to determine a minimal penalty score among the penalty scores given by each individual comparator as a result of determining the

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degree of similarity between the two textual strings (See Cuthbertson et al. col.2, lines 41-67; col.3, lines 44-60).

As per claim 2, Cuthbertson et al. disclose the claimed limitations, wherein the matching means comprises means for extracting a similarity vector for each record pair by generating a similarity score for each of a plurality of pairs of fields in the records, the set of scores for a record pair being a vector by providing a common scoring procedure necessary to determine a minimal penalty score and the degree of similarity between the textual strings (See Cuthbertson et al. col.3, lines 46-60).

As per claim 3, Cuthbertson et al. disclose the claimed limitations wherein the vector extraction means comprises means for executing string matching routines on pre-selected field pairs of the records by providing a matcher enable to determine if the two textual strings match each other (See Cuthbertson et al. col.5, lines 8-22).

As per claim 4, Cuthbertson et al. disclose the claimed limitations, wherein a matching routine comprises means for determining an edit distance indicating the number of edits required to change from one value to the other value. by providing an edit delta (See Cuthbertson et al. col.2, lines 59-63).

As per claim 5, Cuthbertson et al. disclose the claimed limitations, wherein a matching

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routine comprises means for comparing numerical values by applying numerical weights to digit positions (See Cuthbertson et al. col.4, lines 23-57).

### ***Other Prior Art Made Of Record***

14. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. U.S. patents and U.S. patent application publications will not be supplied with Office actions. Examiners advises the Applicant that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)), from the Office of Public Records and from commercial sources. For the use of the Office's PAIR system, Applicants may refer to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

### ***Points Of Contact***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques Veillard whose telephone number is (571) 272-4086. The examiner can normally be reached on Mon. to Fri. from 9 AM to 4:30 PM, alt. Fri. off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272- 4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications



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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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August 03, 2006